

### Claims

1. An apparatus (1) for checking bank notes (BN) which scans the bank notes (BN) to be checked by means of a semiconductor array (4, 5), the semiconductor array (4, 5) being formed by at least two parallel spaced, linear semiconductor arrays (4, 5), and the bank notes (BN) being moved for the check past the semiconductor array (4, 5) and illuminated by a light source (2),  
characterized in that  
the linear semiconductor arrays (4, 5) are formed by at least three layers (b, g, r) which are maximally sensitive to light of different wavelengths, a first linear semiconductor array (4) scanning the bank notes (BN) in a defined range of sensitivity of the semiconductor, and a second linear semiconductor array (5) scanning the bank notes (BN) in a sensitivity spectrum range different therefrom, for which purpose at least the second linear semiconductor array (5) has a filter (6) which passes only a part of the spectrum.
2. The apparatus according to claim 1, characterized in that the first semiconductor array (4) is sensitive to the total spectrum, and the second semiconductor array (5) is provided with a filter which passes only the invisible component of the spectrum.
3. The apparatus according to claim 1, characterized in that the first semiconductor array (4) is sensitive to the total spectrum, and the second semiconductor array (5) is provided with a filter which passes only the visible part of the spectrum but blocks the invisible part.
4. The apparatus according to claim 1, characterized in that the first semiconductor array (4) is provided with a filter which passes only the visible part of the spectrum, and the second semiconductor array (5) is provided with a filter which passes only an invisible part of the spectrum.
5. The apparatus according to any of claims 1 to 4, characterized in that the invisible light is in the infrared range of the spectrum.

6. The apparatus according to any of claims 1 to 5, characterized in that the invisible light is in the ultraviolet range of the spectrum.
7. The apparatus according to any of claims 1 to 6, characterized in that a control and evaluation device (7) is present which processes and evaluates signals from the two semiconductor arrays (4, 5) in order to produce a three-color image and at least one image in the range of invisible light from the signals of the layers (b, g, r) of the two linear semiconductor arrays (4, 5) by a combination of the signals for each bank note (BN) to be checked.
8. The apparatus according to any of claims 1 to 7, characterized in that the semiconductor array (4, 5) and the light source (2) are disposed on the same side and/or on different sides of the bank note (BN).
9. The apparatus according to any of claims 1 to 8, characterized in that the two linear semiconductor arrays (4, 5) are located on a single substrate.
10. The apparatus according to any of claims 1 to 9, characterized in that the two semiconductor arrays (4, 5) are made of silicon.